

REMARKS

In the Office Action, the Examiner objected to the disclosure of the invention due to following informalities "in the CROSS-REFERENCE TO RELATED APPLICATIONS section the patent number needs to be filled in" and requested an appropriate correction.

The disclosure of the invention has been amended to specifically recite "U.S. Patent Number "6,712,406 issued on March 30, 2004"

Accordingly, the Examiner is respectfully requested to withdraw his objection to the disclosure of the invention.

Now turning to the more substantive issues, the Examiner rejected Claims 11-16, and 19 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,446,389 to Heffner et al.

In support of his rejection, the Examiner stated that "Heffner discloses a locking device disposed within a door operator of a passenger transit vehicle door system a lock bar (80) disposed within the door hanger, the lock bar having at least one locking cavity (18), a lock shaft (15) disposed within the locking device, a lock actuator (22) rotatably attached to the lock shaft for enabling rotation of the lock shaft, a lock lever (15L and 15R) attached to the lock shaft for engagement with the locking cavity for maintaining the door hanger in a fully locked position, the lock lever movable into an unlock

position enabled by the lock actuator, a lock latch mechanism (30) disposed within a door lock mechanism of a passenger transit door system (10) for maintaining an unlocking lever in an unlock position, and a manual release lever (47) connected to the lock shaft for rotating the lock shaft into an unlock position upon manual actuation, the manual release lever further rotating the lock lever from such lock position into such unlock position, as in claim 11".

The Examiner further stated that "Heffner also discloses the lock latch mechanism that enables removal of power from the lock actuator upon rotation of the lock lever from such Lock position into such unlock position, as in claim 12, as well as the lock latch mechanism enables removal of power from the lock actuator prior to enabling a prime mover disposed within the door operator for opening a first door attached to the door hanger (column 5, lines 15-17), as in claim 13, as well as the lock lever being mounted about the lock shaft so that gravity tends to move it into such locking position (column 6, lines 15-21), as in claim 14, and where the actuator is a solenoid (column 5, lines 31- 32), as in claim 15, wherein the solenoid is a non-continuous duty type providing more power to move the lock lever from such lock position into such unlock position (column 5, lines 31-37), as in claim 16".

With regard to independent claim 11, in a first aspect, Heffner discloses in Col. 5, Lines 31-37, a lock actuator (22) "connected to unlock arm (27) which is attached to lock shaft (15). Downward movement of unlock arm (27) causes lock shaft (15) to rotate". The present invention discloses and teaches a direct attachment of lock actuator (72) to lock shaft (74) and further discloses and teaches a rotation movement of lock actuator (72) to enable rotation of lock shaft (74).

Nor is applicant's invention made obvious by the cited reference since Heffner teaches a combination of independent "primary lock means" and "secondary lock means" not taught by the present invention. Furthermore, Heffner teaches that "primary lock means" includes ratchet fork (24) engaging ratchet wheel (26).

Additionally, Heffner teaches a lock roller (51) for rotating lock shaft (15) from unlocking into locking position during door movement in the closing direction. Such roller (51) is not required by the present invention.

Therefore, claim 11 is patentably distinguished from the Heffner reference.

Next, the Examiner stated that *"Heffner additionally discloses a locking device disposed within a door operator of a passenger transit vehicle door system having a lock shaft (15) disposed within said locking device, a lock lever (15L and 15R)*

pivotally attached to said lock shaft, a first lock bar (80L) disposed within said door hanger, said first lock bar having a cavity (18) for engagement with said lock lever, a second lock bar (80R) disposed within said door hanger, said second lock bar having a cavity for engagement with said lock lever, a lock actuator (22) pivotally attached to said lock shaft for enabling said lock lever to move from such locking position to such unlocking position, a lock latch mechanism (30) disposed within said locking device of a passenger transit door system (10) for maintaining an unlock lever in such unlock position, and a manual release lever (47) connected to said lock shaft for rotating said lock shaft into an unlock position upon I manual actuation and for rotating said lock lever from such lock position into such unlock position, as in claim 19".

With regard to independent claim 19, the present invention discloses and teaches a single lock lever (76) for locking the combination of the first door hanger (40) and the second door hanger (60). Heffner discloses a pair of independent lock pawls (15R) and (15L) engaging a respective pair of lock apertures (18R) and (18L).

Further, Heffner discloses in Col. 5, Lines 31-37, a lock actuator (22) "connected to unlock arm (27) which is attached to lock shaft (15). Downward movement of unlock arm (27) causes lock shaft (15) to rotate". The present invention, on the other

hand, discloses and teaches a direct attachment of lock actuator (72) to lock shaft (74) and further discloses and teaches a rotation movement of lock actuator (72) to enable rotation of lock shaft (74).

Additionally, Heffner teaches a combination of independent "primary lock means" and "secondary lock means" not taught by the present invention. Furthermore, Heffner teaches that "primary lock means" includes ratchet fork (24) engaging ratchet wheel (26).

Heffner also teaches a lock roller (51) for rotating lock shaft (15) from unlocking into locking position during door movement in the closing direction. Such roller (51) is not taught by the present invention.

Therefore, claim 19 is patentably distinguished from the Heffner reference.

Accordingly, the Examiner is respectfully requested to withdraw his rejection of claims 11 and 19 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,446,389 to Heffner et al.

In this Office Action, the Applicant broadened independent claims 11 and 19 by removing a limitation associated with a manual release lever (31), which is used only for manual opening of the door. A new claim 20 dependent from claim 11 and a new claim 21 dependent from claim 19 now recite such limitation.

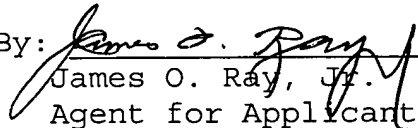
The applicant also addressed various 35 U.S.C. 112 informalities with regards to antecedent basis.

CONCLUSION

In view of the above amendments to the claims and the remarks associated therewith, the Applicant believes that independent claims 11 and 19 are in a condition for allowance and such allowance by the Examiner is respectfully requested. Since it is believed that independent claims 11 and 19 are in condition for allowance, their dependent claims further providing limitations are also in a condition for allowance.

In the event the Examiner has further difficulties with the allowance of the application, he is invited to contact the undersigned attorney by telephone at (412) 380-0725 to resolve any remaining questions or issues by interview and/or by Examiner's amendment as to any matter that will expedite the completion of the prosecution of the application.

Respectfully submitted,

By: 
James O. Ray, Jr.
Agent for Applicant
Registration No. 27,666

JAMES RAY & ASSOCIATES
2640 PITCAIRN ROAD
MONROEVILLE, PA 15146

TELEPHONE: 412-380-0725
FACSIMILE: 412-380-0748